



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1470  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,529	02/13/2002	Joseph Elie Tefaye	P07532US00/MP	4095

881 7590 09/29/2005

STITES & HARBISON PLLC  
1199 NORTH FAIRFAX STREET  
SUITE 900  
ALEXANDRIA, VA 22314

EXAMINER

HOFFMAN, BRANDON S

ART UNIT	PAPER NUMBER
----------	--------------

2136

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/049,529

Applicant(s)

TEFAYE, JOSEPH ELIE

Examiner

Brandon S. Hoffman

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                                                           |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                               | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                                      | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5-9-02 &amp; 6-25-02</u> . | 6) <input type="checkbox"/> Other: ____.                                                |

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority based on applications filed in Australia on August 13, 1999, and August 23, 1999. It is noted, however, that applicant has not filed a certified copy of the Australian PQ2184 and PQ2347 applications as required by 35 U.S.C. 119(b). Accordingly, priority is only given to the PCT, filed August 11, 2000.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-15, 29, 31, and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 1-15, 31, and 32 recite the limitations "permitting a client" and "requiring the client" in the first three limitations. It is unclear what the applicant's intended metes and bounds for the claims are.

5. Claims 3 and 29 recite the limitation "said selected input number" in limitation two. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 8 recites the limitation "said password" in the wherein clause. There is insufficient antecedent basis for this limitation in the claim.

7. Claim 13 recites the limitation "said fractal" in the wherein clause. There is insufficient antecedent basis for this limitation in the claim.
8. Claim 31 recites the limitation "said vendor" in limitation one. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 101***

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claims 1-15, 31, and 32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Permitting a client and requiring a client to perform steps is non-statutory.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claim 32 is rejected under 35 U.S.C. 102(a/e) as being anticipated by Haperen (U.K. Patent No. GB 2313460 A).

Regarding claim 32, Haperen teaches a user authentication method to authenticate a registered user of a service over a computer network, the method comprising the steps of:

- Permitting a client user to request a service from a service provider accessible from said computer network (page 3, last paragraph, user tries to log into terminal);
- Requiring the client user to submit a unique graphic to the service provider (page 3, last paragraph, user clicks certain images);
- Comparing said submitted unique graphic with a unique graphic pre-recorded with said service provider to determine if they are the same (page 4, first paragraph, computer checks supplied password); and
- Granting the client user registered user status if said submitted unique graphic is the same as said unique graphic pre-recorded with said service provider and thereby providing access to said service from said computer network (page 4, first paragraph).

### ***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2136

14. Claims 1-8, 10-21, and 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haperen (U.K. Patent No. GB 2313460 A) in view of Ohta (U.S. Patent No. 5,596,640), and further in view of Kocher (U.S. Patent No. 6,188,766).

Regarding claims 1 and 16, Haperen teaches a user authentication method/system to authenticate a registered user of a service over a computer network, the method/system comprising the steps of:

- Permitting a client user to request a service from a service provider accessible from said computer network (page 3, last paragraph, user tries to log into terminal);
- Requiring the client user to submit at least one unique graphic to the service provider, said unique graphic including embedded second password data (page 3, last paragraph, user tries to log into terminal);
- Extracting the second password from said embedded second password data contained within said unique graphic (page 4, first paragraph, computer finds associated identification via a table);
- Comparing the submitted first password and extracted second password to determine if a pre-defined relationship exists between the passwords (page 4, first paragraph, computer checks supplied password); and
- Granting the client user authentic registered user status if said pre-defined relationship exists and providing access to said service (page 4, first paragraph).

Haperen does not teach requiring the client user to submit at least one first password to the service provider.

Ohta teaches requiring the client user to submit at least one first password to the service provider (fig. 27, step 33/34).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine obtaining a first password from the client, as taught by Ohta, with the method/system of Haperen. It would have been obvious for such modifications because a password restricts entry of certain data/services to an authorized password bearer.

The combination of Haperen and Ohta does not specifically teach a service provider. However, Kocher teaches a service provider (col. 9, lines 50-65).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine a service provider, as taught by Kocher, with the method/system of Haperen/Ohta. It would have been obvious for such modifications because a service provider, when supplied with the proper password, supplies a service to a client that is authorized for said service.

Regarding claims 2 and 17, Haperen as modified by Ohta/Kocher teaches said method further comprising the step of allowing a registered user of said service to select said first password (see col. 6, lines 19-30 of Ohta).

Regarding claims 3 and 29, Haperen as modified by Ohta/Kocher teaches said method further comprising the steps of:

- Allowing said user to select an input value (see page 3, last paragraph of Haperen, user selects input symbols);
- Using said selected input number to index a table to determine a table number (see page 4, first paragraph of Haperen, use of a table); and
- Using the table number to determine an output number and thereby the second password (see page 4, first paragraph of Haperen, use of a table).

Regarding claims 4 and 30, Haperen as modified by Ohta/Kocher teaches wherein said method comprises the step of randomly mapping input values with output values (see page 4, first paragraph of Haperen).

Regarding claims 5 and 18, Haperen as modified by Ohta/Kocher teaches wherein said second password is issued once the registered user has selected said first password, and said second password is issued according to said pre-defined relationship (see fig. 11, 'set a password' of Ohta).



Regarding claims 6-8 and 19-21, Haperen as modified by Ohta/Kocher teaches wherein said predefined relationship is determined according to one of the formula  $y=x$ ,  $y=mx$ ,  $y=mx+c$ , wherein said passwords are numerical and  $y$  is said first password,  $x$  is said second password and  $m$  and  $c$  are constant (see fig. 12, 'compare the password' and fig. 27, step 33/34 of Ohta).

Regarding claims 10 and 23, Haperen as modified by Ohta/Kocher teaches wherein said service relates to credit card payment facilities or electronic mail services (see col. 9, lines 50-65 of Kocher).

Regarding claims 11 and 24, Haperen as modified by Ohta/Kocher teaches wherein said service provider is a credit card payment authorization service (see col. 9, lines 50-65 of Kocher).

Regarding claims 12 and 25, Haperen as modified by Ohta/Kocher teaches wherein said unique graphic is a fractal (see fig. 1 of Haperen, any one of the images could be a fractal).

Regarding claims 13 and 26, Haperen as modified by Ohta/Kocher teaches wherein said fractal is drawn according to a Mandelbrot set according to the set of values of  $C$  for the series  $Z_{n+1} = (Z_n)^2 + C$  (see fig. 1 of Haperen, any one of the images could be a fractal).

Regarding claims 14 and 27, Haperen as modified by Ohta/Kocher teaches wherein date time stamp data is issued to a registered user when they are issued with the unique graphic and this date time stamp is embedded within said unique graphic (see abstract of Kocher).

Regarding claims 15 and 28, examiner takes Official Notice that a transaction number is issued to the registered user for each service request that is granted over the computer network would have been obvious to one of ordinary skill in the art. It would have been obvious because, as is well known in online transaction systems, a user is given a transaction number for each purchase to provide a unique ID number for later verification.

Regarding claim 31, Haperen teaches a user authentication system to authenticate a registered user of a credit card service on an Internet environment, the authentication system comprising:

- A client device operable by a user, said client submitting a unique graphic including an embedded second password, to the service provider via said web pages (page 4, first paragraph, the graphic is compared with a table in the computer to determine the actual password); and
- Authentication software adapted to interface with said server to thereby extract the second password from the unique graphic and compare the submitted first

Art Unit: 2136

password and second password to determine if a pre-defined relationship exists between the passwords (page 4, first paragraph, computer finds associated identification via a table and computer checks),

- Wherein in use, the client user is granted registered user status and is allowed access to said credit card service if said pre-defined relationship exists (page 4, first paragraph).

Haperen does not teach a server connected to the Internet having one or more web pages associated with a vendor, said vendor web pages permitting purchase of goods/services therefrom and a client device adapted to connect to said service via the Internet and download one or more of said web pages, said client user being thereby permitted to submit a first password.

Ohta teaches a client device, said client user being thereby permitted to submit a first password (fig. 27, step 33/34).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine supplying a first password for services acquired, as taught by Ohta, with the system of Haperen. It would have been obvious for such modifications because a password restricts entry of certain data/services to an authorized password bearer.

The combination of Haperen and Ohta still does not teach a client-server relationship. However, Kocher teaches a server connected to the Internet having one or more web pages associated with a vendor, said vendor web pages permitting purchase of goods/services therefrom and a client device adapted to connect to said service via the Internet and download one or more of said web pages (col. 9, lines 50-65).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine a client-server service provider, as taught by Kocher, with the system of Haperen/Ohta. It would have been obvious for such modifications because a password restricts entry of certain data/services to an authorized password bearer.

Claims 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haperen (U.K. Patent No. GB 2313460 A) in view of Ohta (USPN '640), and Kocher (USPN '766), and further in view of Cole et al. (U.S. Patent No. 5,226,080).

Regarding claims 9 and 22, Haperen as modified by Ohta/Kocher teaches all the limitations of claims 1 and 16 above. However, the combination does not teach wherein said user selects calendar dates as a password and a random number is issued that is associated with said selected one or more calendar dates.

Cole et al. teaches wherein said registered user selects one or more calendar dates as a password and a random number is issued that is associated with said selected one or more calendar dates, said random number being used to identify said registered user (col. 7, lines 19-49).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine using calendar dates as a password, as taught by Cole et al., with the system of Haperen/Ohta/Kocher. It would have been obvious for such modifications because a password based on dates provides the user an easy-to-remember password (birthdates of a family member).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon Hoffman whose telephone number is 571-272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2136

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Branda H.*  
BH

*CEL*  
Primary Examiner  
AU2131  
9/21/05